

Table 13.5 from (1986AJ01): Summary of results on the total radiation widths of low-lying levels of ^{13}C - ^{13}N ^a

$J_i^\pi \rightarrow J_f^\pi$	$^{13}\text{C}^*$ (MeV)	Γ_γ (eV)	$^{13}\text{N}^*$ (MeV)	Γ_γ (eV)
$\frac{1}{2}^+ \rightarrow \frac{1}{2}^-$	3.09 ^b	0.43 ± 0.04	2.37	0.64 ± 0.07
$\frac{3}{2}^- \rightarrow \frac{1}{2}^-$	3.68 ^c	0.41 ± 0.04	3.51 ^f	0.70
$\frac{5}{2}^+ \rightarrow \frac{1}{2}^-$	3.85 ^d	$(5.32 \pm 0.09) \times 10^{-5}$ ^e	3.55	$< 2 \times 10^{-3}$

^a See also [Tables 13.12](#) and [13.17](#). For references see [Table 13.6 in \(1981AJ01\)](#).

^b $E_x = 3089.443 \pm 0.020$ keV, $E_\gamma = 3089.049 \pm 0.020$ keV*([1980WA24](#)): here, and in footnote ^d, measured values are asterisked; the others are derived.

^c Branching ratio for cascade via $^{13}\text{C}^*(3.09)$ is $0.75 \pm 0.04\%$ ([1980WA24](#)), $(0.74 \pm 0.05)\%$ ([1982MU14](#)). $E_x = 3684.482 \pm 0.023$ keV, $E_\gamma = 3683.921 \pm 0.023$ keV. $\delta(E2/M1) = -0.094 \pm 0.009$. E_γ for the transition to $^{13}\text{C}^*(3.09)$ is 595.013 ± 0.011 keV ([1980WA24](#)).

^d Branching ratios for cascades via $^{13}\text{C}^*(3.68, 3.09)$ are $(36.3 \pm 0.6)\%$ and $(1.20 \pm 0.04)\%$, respectively ([1980WA24](#)). $E_x = 3853.783 \pm 0.022$ keV, $E_\gamma = 3853.170 \pm 0.022$ keV; E_γ for the transitions to $^{13}\text{C}^*(3.09, 3.68)$ are 764.316 ± 0.010 keV* and 169.300 ± 0.004 keV* ([1980WA24](#)) [169.356 ± 0.020 keV ([1984SC09](#))].

^e The ground-state branching ratio is $(62.5 \pm 0.6)\%$ ([1980WA24](#)) and $\delta(E3/M2) = +0.12 \pm 0.03$ ([1966PO11](#)).

^f Branching ratio for cascade via $^{13}\text{N}^*(2.37)$ is $(8 \pm 1)\%$ ([1974RO29](#)). See also footnote ^g in [Table 13.17](#).